# PERMIT AMENDMENT NO. 3295-165-0012-V-03-5 ISSUANCE DATE:



# **ENVIRONMENTAL PROTECTION DIVISION**

# **Air Quality - Part 70 Operating Permit Amendment**

Facility Name: U.S. Silica Company

Facility Address: 3949 Highway 17 S

Millen, Georgia 30442 (Jenkins County)

Mailing Address: 3949 Highway 17 S

Millen, Georgia 30442

Parent/Holding Company: U.S. Silica Company

**Facility AIRS Number:** 04-13-165-00012

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

# Change the HF emission limits in the permit based on the latest source tests.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. 3295-165-0012-V-03-0. Unless modified or revoked, this Amendment expires simultaneously with Permit No. 3295-165-0012-V-03-0. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. TV-736046ated March 9, 2023; any other applications upon which this Amendment or Permit No. 3295-165-0012-V-03-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 3 pages.



DRAFT

Richard E. Dunn, Director
Environmental Protection Division

# **Table of Contents**

Permit No.: 3295-165-0012-V-03-5

PART 1	1.0	FACILITY DESCRIPTION	1
1	1.3	Process Description of Modification	
PART 3	3.0	REQUIREMENTS FOR EMISSION UNITS	
3	3.3	Equipment Federal Rule Standards	
PART 6	6.6	OTHER RECORD KEEPING AND REPORTING REQUIREMENTS	
6	6.1	General Record Keeping and Reporting Requirements	
ě	6.2	Specific Record Keeping and Reporting Requirements	

U.S. Silica Company Permit No.: 3295-165-0012-V-03-5

#### PART 1.0 FACILITY DESCRIPTION

#### 1.3 Process Description of Modification

U.S. Silica is requesting to update the hydrogen fluoride (HF) emissions limit from Kiln No. 1 to reflect updated stack testing results. No equipment additions, modifications, or changes are necessary as a result of this request. The proposed emission limit increase will not impact maximum production, equipment, or other facility-wide potential or actual emissions.

# PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

# 3.3 Equipment Federal Rule Standards

#### **Amended Condition**

3.3.12 Emissions of hazardous air pollutants (HAPs) shall not exceed the following 112(g) case-by-case MACT emission standards:

[40 CFR 63.40 through 63.44/112(g) case-by-case MACT]

Table 3.3-1: 112(g) Case-By-Case MACT Emission Limit

Affected Source	HAP	Emission Limit	Averaging Time	Compliance Method
Spray Dryers SD01 & SD02	Methanol	0.48 lbs/ton of kiln feed Not to exceed 10.04 tons per year	Monthly for the kiln feed limit and 12-month rolling total for the annual limit	Mass balance based on kiln feed and methanol-containing additive input records and MSDS
	НСІ	Not to exceed 1.30 lbs/hr and no less than 90 % reduction by weight	3 hours	Method 26 or 26A
Kiln KLN1		Not to exceed 5.69 tons per year	12-month rolling total	Calculation based on triennial testing result & production records
KIIII KLIVI	HF	Not to exceed <b>2.8</b> lbs/hr and no less than 90 % reduction by weight	3 hours	Method 26 or 26A
		12.4 tons per year	12-month rolling total	Calculation based on triennial testing result & production records

### PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

## **6.1** General Record Keeping and Reporting Requirements

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)] //add citations from specific standards (i.e. NSPS) that require excess emissions reporting//

Permit No.: 3295-165-0012-V-03-5

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
  - i. Each exceedance of visible emission limit of 10% opacity (three 6minute averages) for Kiln KLN1 and Spray Dryers SD01 and SD02, as indicated by certified visible emissions observer measurements or COMS.
  - ii. Firing of the Boiler BLR1, Spray Dryers SD01 and SD02 and Kiln KLN1 with fuel(s) other than natural gas and propane.
  - iii. Any monthly average of methanol emissions from any spray dryer that exceed the limit of 0.48 lbs per ton of kiln feed in Condition 3.3.12.
  - iv. Any 12-month rolling total of methanol emissions from any spray dryer that exceeds the 10.04 tons limit in Condition 3.3.12.
  - v. Any instance of firing any of the stationary emergency diesel generators subject to Condition 3.3.10 with diesel fuel that contains more than 0.0015% sulfur (15 ppm) by weight; contains either more than 35% by volume of aromatic content or has a cetane index of less than 40.
  - vi. Any 12-month rolling total of HCl emissions from Kiln KLN1 that exceeds the 5.69 tons limit in Condition 3.3.12.
  - vii. Any 12-month rolling total of HF emissions from Kiln KLN1 that exceeds the **12.4** tons limit in Condition 3.3.12.

- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
  - i. Any temperature at the inlet of any baghouse specified in Condition 5.2.2 that exceeds the filter bag design temperature or the equivalent filter bag design temperature, as recorded in accordance with Condition 5.2.2.

Permit No.: 3295-165-0012-V-03-5

- ii. For the sources specified in Condition 5.2.3, any two consecutive required daily determinations of visible emissions from the same source for which visible emissions are equal to or exceed the opacity action level.
- iii. Any visible emissions or mechanical failure or malfunction discovered by the walk through described in Condition 5.2.5 that are not eliminated or corrected within 24 hours of first discovering the visible emissions or mechanical failure or malfunction.
- iv. Each event that the quarterly 30-minute visible emissions inspection required by Condition 5.2.7 was not conducted.
- v. Any instance of operating any of the stationary emergency diesel generators for more than 500 hours during any period of 12 rolling/consecutive months as limited by Condition 3.2.4.
- vi. Any instance of the accumulated maintenance check and readiness testing time for any emergency stationary diesel generator exceeding 100 hours during any period of 12 rolling/consecutive months as limited by Condition 3.3.4.
- vii. For Kiln KLN1, each occurrence when the kiln baghouse inlet temperature exceeds 475°F as detected by an alarm in accordance with Condition 5.2.11.

### 6.2 Specific Record Keeping and Reporting Requirements

#### **Amended Condition**

6.2.13 The Permittee shall use the monthly HCl and HF emission data in Condition 6.2.12 to calculate total HCl and HF emissions from each calciner during each period of 12 consecutive months. The Permittee shall notify the Division in writing if any 12-month rolling total of the HCl or HF emissions exceed the 5.69 ton or **12.4** ton limits in Condition 3.3.12. This notification shall be postmarked by the 15<sup>th</sup> day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the annual HCl or HF emission limit.

[391-3-1-.02(6)(b)1 and 40 CFR 63.40 through 63.44/112(g) case-by-case MACT]